

A MULTI-PERSPECTIVE ANALYSIS OF AGRICULTURAL POLICIES IN WEST AFRICA: POLICY STRATEGIES FOR RETHINKING SUSTAINABLE AGRICULTURAL DEVELOPMENT

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The purpose of this study is to analyze agricultural policies and their changes through a multi-perspective approach and suggest the policy strategies for rethinking Sustainable Agricultural Development (SAD) in West Africa. To reach the study's goal, this paper investigates the structural changes and trends of agricultural policy, the key elements of current agricultural policy, the policy challenges, and instruments suitability. In the study, qualitative analysis was used as a primary research tool. Within this framework, a comprehensive approach enabling holistic assessment, including multi-perspective analysis and the acronym EFFECTIVE as assessment criteria for each policy tool, has been employed. The study results showed that there have been significant changes in West African agriculture over the years in production, modernization and mechanization, agro-food processing, marketing and trade, financing, and policies. Despite these changes, agricultural policies implemented so far could not solve food security, agricultural development, and rural development. Therefore, it is necessary to rethink SAD through a comprehensive agricultural policy approach that simultaneously considers elements, activities, and outcomes of any sub-sector of the agricultural system. The policy strategies should be oriented toward practical and clearly described sub-policies, including specific tools and instruments and strategies related to financing, productivity, cooperation system, and governance for any sub-division of agriculture.

Keywords: Agricultural policies, multi-perspective analysis, policy strategies, sustainable, agricultural development, west Africa.

INTRODUCTION

Agriculture is a multifunctional sector playing a fundamental role in achieving growth, development and food security at the national and global level. It ensures the sustainable (economic, social and environmental) stability of nations through its contribution to employment, poverty reduction, social welfare, biodiversity conservation, and the maintenance of the environment, landscape, and viability of rural areas. This cruciality put agriculture at the heart of Sustainable Development Goals of United Nations, and as a result of the total 17 SDGs, eight (such as SDG 1, 2, 6, 7, 12, 13, 14 and 15) are directly linked to agriculture (FAO, 2015). In this regard, the sustainability of agricultural development and agricultural production systems becomes evident both in developing and industrialized/ developed countries to achieve global sustainable development. However, it cannot be possible to achieve any development without suitable

agricultural policies. That justifies the constant availability of agricultural policy according to indigenous agricultural potential and economic structure in every country or region. In effect, the agricultural policy defines a set of laws, tools and measures related both to domestic agriculture and agricultural trade (OECD, 2020). Involving various concerns such as reducing poverty, food security, social and economic welfare, biosecurity, environmental and landscape quality; agricultural policies apply a wide range of policy tools and measures to achieve a specific outcome in the sector (predetermined goals both for agricultural production & development and for domestic and foreign agricultural product markets). Besides, situational changes, political and macroeconomic reforms and regulatory changes either in the world or in the countries affect the agricultural economy and involve reforms in the sector. That means detailed conditional knowledge and critical understanding of these changes are required to estimate their impacts on economic conditions and



agricultural policies. In this way, understanding how applied policy measures affect the agricultural sector in a short and long time can be helpful for the reorientation of the news policy tools.

In this vein, to identify the new policy directives for rethinking sustainable agricultural development, this study aims the assessment of agricultural policies in West Africa, where the agricultural sector is the most important sector with a 60% share in total employment and 35% of GDP (FAO, 2015). Agriculture contributes continuously and differently to countries' GDP and total employment (Allen *et al.*, 2018). Characterized by significant variation of agricultural potentialities across countries, agriculture is more developed in the West Africa region, especially in countries favorable to agriculture or have high agricultural potential. As a result, the main productions and achieved agricultural development and food security in the region differ among countries. Moreover, the increasing food insecurity in the time of ascendant demographic trends both in the region and in the whole African continent brought up reform requirements using innovative approaches and considering the economic, social, environmental and international developments in the African agriculture sector in order to ensure the sustainable use of resources but also to meet the growing food needs and achieve sustainable agricultural development. These reforms, which started at the national level with various determination of policy programs, expanded to the regional and continental levels. At continent-scale, the New Partnership for Africa's Development policy has reflected all sectors, and the policies in the agricultural sector policies have been revised and reached the standard agricultural policy in the West African region. At the same time, the effort and steps towards food security of the West African Economic and Monetary Union named WAEMU also conducted the unification of agricultural policy. However, the desired results have not yet been achieved despite these structural adjustments and agricultural policies regulations. This requires thus a holistic assessment of current policies reflecting new perspectives to rethink solutions to food security and agricultural development challenges in the region.

In this context, this study intends to comprehensively assess agricultural policies in West Africa through a multi-perspective approach. In particular, the present paper analyzed the West Africa Common Agricultural Policy, combining several historical, politico-institutional, socio-economic and environmental; and suggested the policy strategies for rethinking sustainable agricultural development.

MATERIALS AND METHODS

In this work, qualitative analysis was used as a primary research tool. After identification and collection of required related materials such as policy documents (like acts, guidelines, directives), policy review documents and drafts

(white papers, technical reviews etc.), related papers (academic papers, conference papers, books etc.) and grey literature (as project reports etc.) (Springate-Baginski and Soussan, 2002); data extraction, and analysis and synthesis of indispensable data was meticulously conducted.

Indeed, in the field of studies on agricultural policies analysis, several econometric models, integrated assessment modeling (like combining agent-based model, empirical-based model and simulation model) have been proposed and used in various explorations. Nonetheless, in previous studies, it is evident that the historical trends of structural changes and comparative perspectives of agricultural policies are not considered in the analysis methodology. Hence, the present paper turns to a multi-perspective approach which is a successful tool for doing a completely holistic and comprehensive analysis of agricultural policies in the West Africa region. A multi-perspective approach is an unbounded system thinking-based method to address a problem considered sweepingly as many perspectives as possible during a problem solving or situation analysis (Turpin *et al.*, 2009). This means the multi-perspective approach promotes interdisciplinary and intercultural abilities and comprehensiveness while considering the interrelatedness and inseparability of all aspects in addressing a problem. This approach proved in 1993 by Mitroff and Linstone (Turpin *et al.*, 2009) can be used in any field; that is why its employment is seen in both life sciences and social sciences studies.

In the present investigation, the multi-perspective approach was used combining and integrating different perspectives of relevance such as historical, socio-economic, environmental, politico-institutional, financial and comparative to explore agricultural policies challenges and define the main types of perspective that could constitute the fundamental and essential bases or pillars in the rethinking of agricultural policies in West Africa. Indeed, in the approach, evaluation criteria such as effectiveness, technical viability, political feasibility/durability, economic efficiency, administrative operability, coherence and flexibility, and local appropriateness for social inclusion of each policy tool (Henstra *et al.*, 2020) have been taken into consideration. Thus, for any perspective, making from these criteria precisely Effectiveness, Feasibility, Flexibility, Efficiency, Coherence, Technical appropriateness, Inclusiveness, Viability, and Equity the acronym EFFECTIVE as assessment criteria, each policy tool have been examined.

Furthermore, to determine the policy strategies for rethinking agricultural policies, the results from the multi-perspective analysis have been assembled into four main sets of perspectives. Thus, apart from the three main pillars of sustainable development, the subsidiary perspective pillar has been considered.

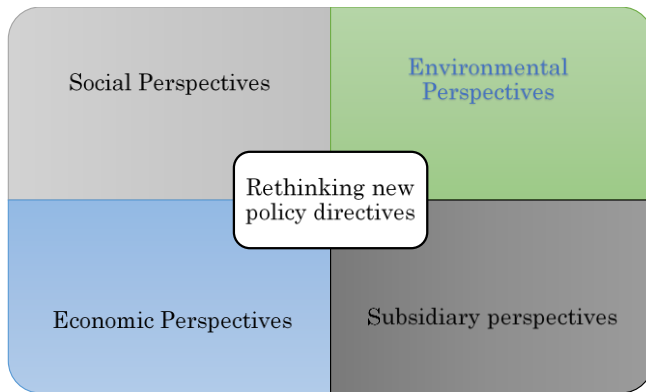


Figure 1. An analytical framework for rethinking policy directives in the context of SDG

RESULTS AND DISCUSSION

A Short History of Structural Changes and Trends of Agricultural Policy in West Africa: Like various regions of the world, agricultural policies in West Africa have undergone significant historical developments based both on the mode of political governance and the periods. Concerning the periods-based evolutions of agricultural policies, pre-independence and post-independence periods can be identified as significant historical periods in West Africa.

Document and content analyses revealed that despite the region's agricultural potential, no regular and planned agricultural policy was prepared or implemented during the pre-independence period. However, under colonial pressure, the colonized countries were forced to adopt strategies and policies imposed by the colonizers in all plans and sectors, including agriculture. As colonies, the West African countries were agricultural exports to Europe (Anderson and Masters, 2009). Thus, during the pre-independence period, the West African agricultural sector experienced the integration and inclusion of exogenous crops, primarily industrial and originating from America. Action-oriented strategies towards the promotion and development of these crops have reduced the attention paid to food crops, animal production and agri-food processing. Hence, before independence, agricultural policy in West Africa focused on the production of exportable products, such as cocoa, cotton, coffee, groundnuts, and oil palm and placed little priority both on the production of non-export commodities and the strategies for the development of staple subsistence crops for internal consumption or domestic market (Anderson and Masters, 2009). The combined action of the absence of policy and the implementation of the policies imposed by the colonizers could constitute the historical cause of the underdevelopment of the agricultural sub-sectors.

As for post-independence agricultural policies, they are essentially period-specific political regulations and applications. The first policy strategies of this period were

implemented from the earliest moment of the post-independence period and expanded until the mid-1980s. This initial phase of independence was characterized by strategies that consisted only in extracting resources from agriculture to finance growth in other sectors of the economy, which was not a good start for the sustainable development of the agricultural sector. (FAO and BAD, 2015). Except for some policies in Ivory Coast and Liberia, central authorities developed the policies with no genuine involvement of farmer groups or the private sector. In doing so, known as a state-led development approach, the main government policies in the agricultural sector can be summarized essentially as those relating to exchange rates, the prices of marketing boards, export taxes, input subsidy and taxes on competing imports (FAO and BAD, 2015). Even the small urban population and the abundance of cultivable land have influenced agricultural policies, the absolute pressure of the French treasury more affected these policies and their pertinence (FAO and BAD, 2015). For example, to satisfy the conditions imposed by the French Treasury, many governments, more specifically in the countries colonized by France, adopted inappropriate production and trade policies both in agriculture and another sector.

The second policy strategy of post-independence agricultural policies is constituted by political regulations and applications adopted between the mid-1980s and the mid-1990s, under pressure from international financial institutions such as the IMF and the World Bank and known as Structural Adjustment Programs (SAPs). SAPs predominated macroeconomic reforms over sectorial policies such as prerequisite for sound economic growth (FAO and BAD, 2015). These programs consisting of three main components have adopted several policies which the most essential are price incentives for export crops, reductions in production taxes, customs tariffs and export taxes (still in cash crops), the reduction of production protection and protectionism in certain products, particularly in the food industry; trade liberalization and privatization, currency devaluations and exchange rate reforms, the abolition of official pricing and marketing systems, and the closure of many public agricultural development banks (FAO and BAD, 2015). It would be notable for underlining that the combined effect of these different strategies has negatively affected the West African agricultural sector, as we will see in the following sections.

The third and last period began in the early 2000s with the exit from structural adjustment plans and the rediscovery of the importance of agricultural development. This rediscovery has resulted in several processes, including the Comprehensive Africa Agriculture Development Programme (CAADP) and many other programs aimed at greater regional agricultural integration in West Africa; which led to the agricultural policy of WAEMU and the Economic Community of West African States (ECOWAS) (FAO and

BAD, 2015). Section 2 of this paper clarified the development of utmost policies.

Description of Key Elements of West African Agricultural Policy: Concerns about the effects of structural adjustment programs and the strictly increasing interest in the rediscovery of agriculture in the early 2000s conducted intense discussions on agricultural development in West Africa. In this respect, to facilitate the simultaneous interaction between African governments and the African governments with the global economy, international financial institutions and development partners' lively public debates on this issue have led to stronger collective action on continental and regional levels (FAO and BAD, 2015). The transformation of the Organization of African Unity in the African Union (AU) was more closely structured in 2001. The AU's creation of the New Partnership for the Development of Africa (NEPAD) can be cited as the main progress of this more decisive collective action at the continental level. At the regional level, specifically in West Africa, this has addressed the establishment of trade and agricultural policy instruments by regional economic institutions such as WAEMU and ECOWAS. In 2001, UEMOA prepared a regional agricultural

policy for its state members for a more consistent agricultural policy. In parallel with this, the CAADP was developed in 2003 within the scope of NEPAD at the continent level (FAO and BAD, 2015). ECOWAS was commissioned at the regional level to realize this program and ECOWAS's regional standard agricultural policy was adopted in 2005 in this direction. This section examined the critical elements of WAEMU regional agricultural policy (PAU) and ECOWAS agricultural policy (ECOWAP). In the review, as shown in Table 1, the basic diver characteristic of policy such as objective, structure and pillars, the main instruments and tools for domestic and foreign markets, country coverage and mode of implementation were discussed.

WAEMU regional agricultural policy (PAU): Launched in December 2001, the agricultural policy of WAEMU, called PAU (la Politique Agricole de l'UEMOA), aims at contributing sustainably to satisfying the food needs of the population, promoting the economic and social development of the member states and the reduction of rural poverty (UEMOA, 2001; UEMOA, 2009). The PAU, including agriculture, livestock, forestry and fishing, is built on three axes, namely adaptation of production systems and

Table 1. Summary of the key elements of West African agricultural policy: PAU and ECOWAP.

Policy name	Aims and objectives	Pillars or components	Country/ geographic coverage	Main instruments and tools	Mode of implementation
WAEMU regional agricultural policy	Contribute sustainably to satisfying the food needs of the population, to promoting the economic and social development of the member states and the reduction of rural poverty. Specifically, achieve food security, and improve the living conditions of farmers	Three main axes of intervention: adaptation of production systems and improvement of the production environment and the competitiveness of key agricultural value chains (rice, maize, meat, poultry and cotton), deepening the common market of the Union within the agricultural sector and improving the management of shared resources, and integrating agriculture in the WAEMU zone into the regional and international markets. Guiding principles: subsidiarity, proportionality, regionality, complementarity, solidarity, progressivity and partnership	Eight West African countries sharing the CFA franc (Benin, Burkina Faso, Côte d'Ivoire, Guinea-Bissau, Mali, Niger, Senegal and Togo)	Consultative and concerted action structures, Regional Fund of Agricultural Development, Regional System of Agricultural Information	Multiannual programming of activities
ECOWAS agricultural policy	Sustainably contribute to the satisfaction of the food needs of the people, economic and social development, poverty reduction in the Member States, and inequalities between territories, zones, and countries. Seven specific objectives	Main vision: the regional agricultural development focused on the perspective of modern and sustainable agriculture, the effectiveness and efficiency of family farms and the promotion of agribusinesses through the involvement of the private sector; productive and competitive on the intra-community and international markets, it must ensure food security and provide decent incomes to its workers. Six priority areas: the improvement of water management, the improved management of other natural resources, the sustainable development of farms, the development of agricultural value chains and the promotion of markets, prevention and management of food crises and other natural disasters and institutional strengthening. Same guiding principles with PAU	All of ECOWAS country members.	Investments plans; Funding, interest rate subsidy and oan guarantee scheme as a financial tool; Institutional mechanisms such as Advisory Committee, Regional Fund, and Regional Agency for Agriculture and Food; Joint monitoring-evaluation mechanism.	Mobilizing and unifying programs; National Agricultural Investment Plans (NAIP); Regional Agricultural Investment Plan (RAIP)

Source: UEMOA, 2001 and UEMOA, 2009 for PAU and CEDEAO, 2009; CEDEAO, 2015; ECOWAS, 2017a and ECOWAS, 2017b for ECOWAP.

improvement of the production environment and the competitiveness of key agricultural value chains (rice, maize, meat, poultry and cotton), deepening the common market of the Union within the agricultural sector and improving the management of shared resources, and integrating agriculture in the WAEMU zone into the regional and international markets (UEMOA, 2001; UEMOA, 2009). Specifically, the PAU, which aims at achieving food security by reducing food dependency and increasing productivity and agricultural production on a sustainable basis, and improving the living conditions of agricultural producers, has adopted guiding principles and implementation instruments. Among these instruments, multiannual programming of activities, the Regional Fund of Agricultural Development (FRDA), and Regional System of Agricultural Information (SIAR) are the pioneering roles and guiding principles such as subsidiarity, proportionality, regionality, complementarity, solidarity, progressivity and partnership that have allowed the realization of triennial action programs of WAEMU regional agricultural policy (UEMOA, 2001; UEMOA, 2009). Thus, three-year programs have marked the implementation of the PAU since its adoption in 2001. These include the 1st three-year program (2002-2004) devoted to structuring actions which made possible the establishment of the institutional framework, steering and financing instruments and the main regulatory guidance measures for the PAU; and the 2nd three-year program (2009-2011) comprising fourteen (14) diversified action programs, distributed according to the three axes of the PAU.

ECOWAS regional agricultural policy (ECOWAP): The regional agricultural policy of ECOWAS (Politique Agricole de la CEDEAO), shortly named ECOWAP, is the merger result of a complex process of a policy framework that started with the CAADP launched in 2003 with the emergence of the agricultural component of NEPAD and ECOWAP. Adopted with Decision A / DEC.11 / 01/05 on ECOWAS Agricultural Policy in January 2005 by the Heads of State and Government, at the twenty-eighth ECOWAS conference session, ECOWAP is based on a vision of the regional agricultural development focused on the perspective of modern and sustainable agriculture, the effectiveness and efficiency of family farms and the promotion of agribusinesses through the involvement of the private sector; productive and competitive on the intra-community and international markets (CEDEAO, 2009; CEDEAO, 2015; ECOWAS, 2017a). It must ensure food security and provide decent incomes to its workers (ECOWAS, 2017a). ECOWAP includes actions to be carried out at the regional and national levels with the essential aim to sustainably contribute to the satisfaction of the food needs of the people, the economic and social development and poverty reduction in the Member States, as well as inequalities between territories, zones and countries (CEDEAO, 2009; CEDEAO, 2015; ECOWAS, 2017a). This overall goal is declined in seven specific

objectives covering the six priority areas of the policy, including the improvement of water management, the improved management of other natural resources, the sustainable development of farms, the development of agricultural value chains and the promotion of markets, prevention and management of food crises and other natural disasters and institutional strengthening (CEDEAO, 2015).

The operationalization of ECOWAP is based on two key pillars: the National Agricultural Investment Plans (NAIP) at the national level and the Regional Agricultural Investment Plan (RAIP) at the regional level (CEDEAO, 2009). Indeed, to find a quick solution to the global food crisis the Heads of ECOWAS' States adopted in June 2008 the regional offensive for food production and against hunger. This offensive has resulted in the review of the intervention priorities of ECOWAP by forming the basis of the first generation Regional Agricultural Investment Program 2010-2015 adopted in 2010 (ECOWAS, 2017b). The RAIP combines investments and public policy instruments such as regulatory, political, technical and financial tools to improve productive investments in the commercial, physical, informational, institutional and human environment conducive to agricultural development. Accordingly, investments plans, subsidies, interest rate subsidies, and loan guarantee schemes have been retained as financial tools. Institutional mechanisms such as Advisory Committee for Agriculture and Food ACAF, Regional Fund for Agriculture and Food ECOWADF, Regional Agency for Agriculture and Food RAAF, and joint monitoring-evaluation mechanism have been established for the better implementation of ECOWAP and, in particular, its plans and programs (Benkahla, 2010). The first RAIP 2010-2015 is assigned to three specific objectives and with the adoption of the new strategic vision of ECOWAP for 2025 given the new concerns to be taken on board, the second RAIP 2016-2020 was declined to four specific objectives (ECOWAS, 2017b). Thus, at the regional level, the first generation of ECOWAP programs covering the period up to the year 2014 has been marked by mobilizing and unifying programs such as the promotion of food sectors strategic for food security; promoting an overall environment favourable to regional agricultural development; and reducing food vulnerability and promoting stable and sustainable access to a food formulated on the grounds of reviewed intervention priorities (CEDEAO, 2009). Noting that ECOWAP has the same guiding principles as PAU, there are also many programs relating to each specific objective underway for the ongoing regional plan RAIP 2016-20. (for further details, see ECOWAS, 2017b).

Holistic Assessment of Policy Challenges and Instruments:

The review of the literature reveals the absence of an in-depth study on the suitability of agricultural policy instruments in West Africa and their relevance to meet the challenges of West African agriculture. Although several studies unequivocally mention the challenges of agriculture in the

region or the states of implementation and challenges of regional agricultural policies, it should be emphasized that no challenge can be met without a carefully detailed examination of the relevance of approaches, and tools and instruments used to deal with challenges. In this sense, in this section of the paper, agricultural policy challenges and instruments technical, social, and political economy instruments suitability analysis of West African agricultural policy were simultaneously studied.

Nevertheless, other than it would be helpful to briefly look at the impacts of the policies implemented and implemented before this analysis, it can also be serviceable for evidence of next comments. For this reason, the effects of the policies applied in West African agriculture from the past to the present are presented in Table 2. As seen in this table, there have been significant changes in West African agriculture over the years in production, modernization and mechanization, agri-food processing, marketing and trade, financing and policies. The pre-independence period is characterized by lasting impacts on agricultural policies and basic crops. The period known as the government-driven development approach led to significant real and side effects on agricultural and sectoral development. SAPs have left a

direct double impact on agricultural growth and trade, which greatly affected regional environmental, economic, and social conditions. As for the standard agricultural policies prepared by the economic unions in the region, it is understood that their implementation not only faced considerable multi-dimensional problems but also thitherto could not meet the region's food security and agricultural development challenges.

Furthermore, based on a multi-perspective approach, the evaluation of the suitability of chosen or adopted policy instruments in PAU and ECOWAP for duelling challenges and achieving policy goals. In fact, for any perspective, making from various criteria such as Effectiveness, Feasibility, Flexibility, Efficiency, Coherence, Technical appropriateness, Inclusiveness, Viability, and Equity the acronym EFFECTIVE as assessment criteria, each policy tool has been examined. In this respect, the general nature of the tools in the PAU and ECOWAP did not allow the in-depth analysis as desired.

From a historical perspective of the policy formulation process, it should be remembered that in most cases, the process is based on non-participatory and non-inclusive approach with broad participation of foreign commercial and

Table 2. Major effects of the policies applied in West African agriculture.

Period/ Policy name	Policy/agriculture aims	Policy tools and instruments (or main elements of the approach)	Impacts of policy
Before 1957: Pre-independence period	Unspecified	No regular and planned agricultural policy, Colonial pressure with the adoption of the strategies and policies imposed by the colonizers in all plans and sectors, including agriculture, Action-oriented strategy towards the promotion and development of introduced exogenous crops.	Integration and inclusion of exogenous crops in West African agriculture, Low attention to the livestock industry and agri-food processing, Historic start of the underdevelopment of the agricultural sub-sectors such as food industry, fishery and forest industry.
1957-1980: From the post-independence period until the mid-1980s; government-driven development approach	Achieve rapid progress in industrialization, Fuel growth in the non-agricultural sectors, Extract resources from agriculture to contribute to non-agricultural growth, Also, in-country colonization by France met conditions imposed by the French treasury.	Expanding the area under cultivation for agricultural growth, The legal monopoly of state structures for agricultural marketing such as marketing boards, Principal support for cash crops, Drop-in producer prices for cash crops, Reduction of incentives for agricultural production, Implicit taxation of agriculture, Highly overvalued exchange rates.	Lack of improvement in agricultural production techniques and technologies Low competitiveness of exports and cheapness of imports, Increasing cross-border illicit trade, Misperception for international agricultural markets, Decreasing production growth rates, Rapid depletion of resources, Augmentation of intersectoral transfer of resources.
1980-2000: Structural Adjustment Programs (SAPs)	Macroeconomic reforms	Price incentives for export crops, reductions of production taxes especially in cotton and cocoa, reductions of customs tariffs and taxes in exportation; Reducing production protection and protectionism in certain products, particularly in the food industry; Trade liberalization and privatization of certain public enterprises; Currency devaluations and exchange rate reforms; Removal of official pricing systems, the closure of marketing boards and public agricultural development banks.	Increase in production growth rate; Falling of growth rates in poultry production, powdered milk, raw sugar and some products, destruction of markets for local producers, closures of many food manufacturing and processing industries; Export-led growth of export crops, massive importation of import substitutes and competing products at low prices Increasing interest rates, transport costs and agricultural inputs and reducing of investments in agriculture; High price variability and volatility, reduction of inputs and credit availability.

Source: (FAO and BAD, 2015).

institutional investors, international donors and organizations instead of local investor and socio-occupational organizations. That can be seen in all the historical periods of agricultural policies in the region, from the government-driven development approach to SAP and current policies. Although this has become an institutional habitude of states and regional organizations in the region, the need to get rid of it permanently is essential to be EFFECTIVE.

Further, from the socio-economic point of view, beginning by pointing out the importance of the really good objective of regional policies would not be reprehensible. Nonetheless, the policy instruments adopted for this purpose are neither specific nor appropriate to achieve its objectives. The lack of simple, inexpensive and transparent instruments to support agricultural production compromises the achievement of food self-sufficiency/independence. Therefore, the level of protection induced by these policies is particularly low because their main tools in this object are basically all linked to international markets and liberalization: harmonization of norms and standards, lower tariffs between member countries and vis-à-vis the outside, adoption of standard external tariffs (CET) at levels lower than the average national tariffs previously applied (Balié and Fouilleux, 2008). These agricultural trade policies limit the protection of the domestic market and protect imported products in general and particularly European productions from possible competition from products from outside.

Moreover, that is why Balié and Fouilleux (2008) affirm that the logic of food autonomy research promoted by the African regional agricultural policies is not based on the food production, but rather on the fact of having financial capacities to import or buy it in international markets. Also, the monitoring and analysis of agricultural and food policies in Africa covering 10 African countries, 4 of which are West African (Burkina Faso, Ghana, Mali and Nigeria), have shown that the agricultural policies in place do not give effective priority to improving the food security of the population (Angelucci *et al.*, 2013). As proof to support this statement, the state of food security and nutrition shows the increasing food insecurity in all subregions of Africa (FAO, IFAD, UNICEF, WFP and WHO, 2019). Food security and socio-economic welfare are two interconnected basic inputs for sustainable socio-economic development. Thereby, the food security policies must be revised. Instead of adopting a model of "open regionalism" favouring the global market, there is an urgent need to orient the policy model towards both incentive and protectionist progressively open to beyond Africa.

Also, concerning the agro-based industry or agro-food industry policies, the current policies are considered insufficient because they do not consider the processing and industry parameters of agriculture and its interactions with the industry sector. Nonetheless, although the policies are intended to improve the competitiveness of agricultural

chains in the face of competition from third countries, this will not be possible without any high value-added products driven by innovative and sustainable agro-based industry. This need for the global competitiveness of West African agricultural sector and the growth of the agro-food industry make the policies based on that perspective essential.

On the environmental front, the West African regional policies partially involve environmental issues to build a joint and actively coordinated strategy for developing shared natural resources. One of both the main intervention axes of PAU and the priority area of ECOWAP concern improving the management of shared resources (See table1). This is indisputably and ideally normal insofar as agro-environmental spaces, ecological and agrarian landscape in the region is critical. Abdoulaye Bamoi and Yılmaz (2020) emphasized this criticality by explaining the main agro-environmental challenges in West Africa. However, it is important to note that the tools to address these questions are imprecise in the PAU and ECOWAP. That is why it is quite right to affirm that current regional agricultural policies implemented do not mindfully consider the agro-environmental issues of the region and do not include EFFECTIVE agro-environmental policies (Abdoulaye Bamoi and Yılmaz, 2020).

On the other hand, regarding the politico-institutional perspective, the simultaneously double membership of many countries to several regional groupings, which correspond to different realities and sometimes have different or even contradictory objectives, constitutes the origin of the significant competitive rivalry between organizations (Balié and Fouilleux, 2008). For instance, more than 5 regional or continental organisations such as WAEMU, CILSS, ECOWAS, CEN-SAD, AU coexist in the West African region. This fact is the object of the coexistence of policy, weighing considerably on their implementation and policies at the national level. This alarming situation causes competition between regional structures in place of development target-driven cooperatively works.

Additionally, agricultural research and extension, indispensable for productivity and agricultural development and innovation, are not yet promoted to fair value in PAU and ECOWAP. Fan and Zhang (2008) considered that agricultural extension and research are the two categories of investment that have had the most powerful impact on agricultural productivity and poverty reduction compared to other categories of public expenditure. Fuglie and Rada (2013) have also shown that higher productivity in the agricultural sector is linked to investment in agricultural research. Despite this verified indispensability, support for agricultural research has been very weak in West Africa. In particular, neither the regional policies have perfectly included strategies for agricultural research and extension.

In financial terms, the operation and implementation of regional policies depend on funds, subsidies and financial

support from donors (IMF, World Bank, EU in particular). External funds finance many regional projects. In the case of WAEMU, for example, recourse to international financial aid for the financing of the PAU is even written in the legal text of the policy (Balié and Fouilleux, 2008). Therefore, this situation requires that policies respond to external pressures and influences or regional interface conditions to obtain funds. This tool is inappropriate for financial autonomy as well as political sovereignty risk. That is why the 2003 Maputo declaration engages African governments to devote at least 10 percent of their budgets national agriculture and rural development (UA, 2003). Despite this, significant challenges in terms of financing remain. Indeed, the regional agricultural fund, which is the second financial tool for regional policies, is handicapped by the economic difficulties of member states to pay their obligatory contributions. This mechanism should adopt a more structured approach to planning and managing its full operationalization tools.

Otherwise, a comprehensive formulation and successful policy implementation are strongly dependent on the sufficient disponibility of qualified human resources. Unfortunately, an evaluation of the policies from this point of view shows the insufficiency of the personnel allocated for the conception and the follow-up of the said policies. Balié & Fouilleux also explain this through their assertions "the lack of material and human resources that can be mobilized in the agricultural sector at regional and national levels handicaps the functioning of African common agricultural policies" (Balié and Fouilleux, 2008). At regional and national levels, only a few individuals are assigned to regional administrative affairs related to regional integration and policies. For instance, the WAEMU Commission had only six permanent officials in charge of all administrative work related to the PAU and the Common Policy for the Improvement of the Environment in 2005. The situation is similar in ECOWAS, which in March 2005 had five people in the agriculture department of the ECOWAS General Secretariat responsible for the development of ECOWAP and its implementation in the 15 countries of the sub-region (Balié and Fouilleux, 2008). The case of Niger, where just four people are responsible for the five regional integration organizations (WAEMU, CILSS, ECOWAS, CEN-SAD, African Union) to which the country belongs can be cited as an example at national (Balié and Fouilleux, 2008). From this point of view, it is necessary to have a human resources policy specific to the agricultural sector and based on better development strategy and management of human resources.

Finally, from a comparative perspective, there are many distinctions between West African regional agricultural policies and another common policy depending on the large difference of political and economic contexts and policy content. As for this essential difference, the detailed comparing has not been examined here.

Policy Strategies for Rethinking Sustainable Agricultural Development:

In order to find the proper answer to how to rethinking Sustainable Agricultural Development (SAD), firstly, it will be better to have a good understanding of the SAD concept. The High-Level Panel of Experts (HLPE) defines SAD as an agricultural development that contributes to improving resource efficiency, strengthening resilience and securing social equity/responsibility of agriculture and food systems to ensure Food Security and Nutrition (FSN) for all, now and in the future (HLPE, 2016). This definition is restricted because it restrains SAD objects to FSN, which is its main aim. Zhao et al. (2008) adopted the definition that SAD comprehends the sustainability of agricultural production, of the rural economy, agro-ecosystems and the rural society. This means SAD involves the economic, social and environmental dimensions of sustainable development in agriculture, and including social and human well-being in rural areas.

Besides, for a more comprehensive definition of SAD, in this work, SAD is defined as an improvement process, growth and progress in the agricultural sector that ensures the positive change of the elements, activities and outcomes of agricultural systems for all in the present without damaging the way and bases for the proper functioning of agricultural systems and its components (elements, activities and outcomes) of future generations. That is to say, SAD encompasses both the sustainability of all elements, activities and outcomes of agricultural systems at different levels (farm, village, regional and national). In this definition, agricultural system activities include any activities related to the production, processing, distribution, and utilization at all levels like the farm, village, regional and national levels of agricultural production and mainly farming systems such as crop system, livestock system, fishery system, forestry system, agroforestry system and integrated systems. The agricultural system outcomes refer to the output of these activities for the change in all system elements (environment, people, inputs, processes, infrastructures, institutions, etc.), comprising physical, economic, social and environmental output. It indicates that sustainable agriculture or sustainable farming practices are not an outcome but also an allowing condition of SAD. Thus, based on this definition, rethinking SAD should consider simultaneously elements, activities and outcomes of any sub-sector of the agricultural system. In this context, the basic requirement for achieving SAD is a comprehensive agricultural policy sectionalized into 11 subdivisions such as food security and nutrition policy, livestock policy, agro-industry policy, fisheries development policy, forest development and conservation policy in agriculture, agro-environmental policy, agricultural trade policy, agricultural mechanization policy, rural development policy, agricultural research and extension policy, and agricultural financing policy. Specific tools, instruments, and strategies related to financing, productivity, cooperation

system, and governance should be clearly described in any sub-policies. For this, the feature of policy tools must be SMART that means Specific, Measurable (to say evaluable), Appropriate, Reasonably practicable in time, and EFFECTIVE according to assessable criteria such as Effectiveness, Feasibility, Flexibility, Efficiency, Coherence, Technical appropriateness, Inclusiveness, Viability, and Equity. Agricultural policies can be comprehensive from any perspective and mainly from a social, environmental, economic, and subsidiary perspective (see figure1).

Diao *et al.* (2010) indicate that while Africa faces many new challenges, unlike those faced by Asian countries, little evidence suggests that these countries can bypass a broad-based agricultural revolution to launch their economic transformations successfully. This requires addressing these community and country-specific challenges. Another major concern is that there is no reassurance that smallholder farming communities will respond appropriately to commercialization initiatives (Anonymous, 2020). An entitled study "Agricultural development and food security in Africa: the impact of Chinese, Indian and Brazilian investments" revealed that the debate on small-scale versus commercial farming does not adequately address the root causes of the productivity crisis in African agriculture. Also, the same study emphasized that many of the key blockages to realizing ambitious development goals lie in political and institutional issues that influence the content and direction of agricultural policymaking in Africa (Cheru and Modi, 2013). In agricultural and rural policies, policy-implementing institutions and governments should consider that the set policy objectives cannot be achieved by meeting only several technical issues (Yilmaz, 2006). This is even more important, especially in developing countries. In order to achieve the agricultural policy goals in West Africa, the policy objectives must be well and clearly defined. In West Africa, it can be said that the prevailing conditions in agriculture combined with the mismanagement in macroeconomic and agricultural policies have prevented an overall structural transformation of the sector. West African agricultural policies' short and long-term objectives need to improve productivity and increase production in the agricultural sector.

It is emphasized that there is a positive impact of cooperative membership of farmers on farm income, farm profits, technology adoption, and market participation (Yilmaz, 2008). For this reason, farmer cooperatives that play a vital and active role in the market should be established. Also, rural development aims at increasing farmers' income and improving the welfare of farmers. Agricultural and rural development calls for detailed planning and, most important, practical actions (Yilmaz and Örmeci, 2018). Therefore, coordination among various institutes and economic activities becomes essential for ensuring sustainable rural and agricultural development. In order to achieve sustainable agricultural policy goals, solid and dynamic cooperation

should be provided between governments, institutions, voluntary organizations, and non-governmental organizations.

To finish, having regard to the result of suitability assessment of policy challenges and instruments of PAU and ECOWAP, it is strongly recommended in addition to previous general directives to:

- Redesign agricultural policies according to the previous recommendations where possible;
- Develop food security policies through strategies based on the improvement of productivity of staple food crops;
- Specify the tools and instruments for any goal or activity of policy;
- Clarify agro-environmental tools and instruments;
- Reinforce the existing strategies on livestock, fishery and forest production for sustainable productivity;
- Opt for integrated policy tools and instruments;
- Adopt an autonomous financing scheme for policies;
- Integrate agricultural mechanization, agro-food industry, and agricultural research policy extension and training in the current policies;
- Redirect agricultural trade strategies;
- Privilege participatory approaches in any step of policies;
- Improve basic rural infrastructure for increasing domestic trade inside the countries and the region;
- Strengthen the monitoring and evaluation mechanism of agricultural policy,
- Increase the number of policy staff both at regional and national levels;
- Design a human resources policy for the agricultural sector;
- Redefine the role of non-governmental organizations and partner for better cooperation in agricultural development.

Conclusion: The agricultural policies in West Africa have undergone significant structural changes and trends both on policy approach and tools based on the mode of political governance and the periods. The grand historical periods of these changes are identified as the pre-independence period and post-independence period comprising a period known as a state-driven development approach, period of Structural Adjustment Programs, and the period of standard agricultural policies. The multi-perspective analyses have cleared the effects of applied policies and the suitability of its tools and instrument in facing the region's food security and agricultural development challenges. Based on the obtained result, the policy strategies for rethinking SAD have been suggested. In conclusion, suitable agricultural policies including all the components of the agricultural system and integrating SMART and EFFECTIVE policy tools and instruments identified through participative approach is an essential requirement for the sustainability of agriculture and SAD.

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